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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,449	10/20/2003	Mark Beaumont	DB001078-000	3387

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EXAMINER	
NGO, CHUONG D	

ART UNIT	PAPER NUMBER
2193	

MAIL DATE	DELIVERY MODE
12/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/689,449	BEAUMONT, MARK	
	Examiner	Art Unit	
	Chuong D. Ngo	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 October 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 31-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 31-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-13 and 31-41 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 7,447,720. Although the conflicting claims are not identical, they are not patentably distinct from each other because the are claiming a common the method of operating an n-dimensional array of processing elements and an array of processing elements for finding an extrema for a plurality of values stored in an n-dimensional array of processing elements by determining odd and event extrema. Further, claims 1-13 and 31-41 are clearly anticipated by and obvious from Claim 1-19 of the Patent.

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-13 and 31-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-13 and 31-41 are clearly directed to an invention for computing an extrema of a plurality of values. In order for a claimed invention for performing computation which is a judicial exception to be statutory, the claimed invention must be directed to a practical application of judicial exception, and is not directed to a preemption of a computation. That is the claimed invention must transform an article or physical object to a different state or thing, or produce a useful, concrete and tangible result and not cover every substantial practical application . See State Street 47 USPQ2d; Benson 175 USPQ , and "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", OG Notices: 22 November 2005. It is clear from claims 1-13 and 31-41 that the claimed invention claimed invention does not transform an article or physical object to a different state or thing. The inputs are numbers and the output is also a number. The invention merely involves in calculating, manipulating, storing and transferring data in computing an extrema for a plurality of values. The extrema produce by the claimed invention is not a real world result but merely a numerical value without a practical application recited in the claims that makes the result useful, concrete and tangible. Therefore, Claim 1-13 and 31-41 are directed to computation rather than a practical application of the computation, and thus are non-statutory subject matter. In addition, since the claims fails to limit the invention to any practical application, they appear to cover

every substantial practical application, and thus also directed to a preemption of the claimed computation any and every practical application.

5. Applicant's arguments filed on 10/15/2008 have been fully considered but they are not persuasive.

The examiner agreed that 1-13 and 31-41 fall within the statutory categories as they are clearly directed to a method and an apparatus, respectively. However, the claimed invention falls within a judicial exception because the invention is directed a calculation. Therefore, as set forth above, the claimed is required to recite a practical application for the calculation and not to cover every substantial practical application to be statutory. However, none of the requirements is met by the claimed invention. It should be noted that reciting a apparatus for performing a calculation, or a calculation implemented by a apparatus is not reciting a practical application for the calculation. It is because MPEP, 2106, IV, 2 clearly that a claimed invention is directed to a practical application of a 35 U.S.C. 101 judicial exception when it "transforms" an article or physical object to a different state or thing; or otherwise produces a useful, concrete and tangible result. However, the claimed invention clearly does not transform an article or physical object to a different state or thing; or produce a useful, concrete and tangible result. The extrema produce by the claimed invention is not a real world result but merely a numerical value without a practical application recited in the claims that makes the result useful, concrete and tangible. Further, it should be noted that in re Alappat, claim 15 clearly recite a practical application for the computation, that is "for converting vector list data representing sample magnitudes of an input waveform into anti-aliased pixel illumination intensity data to be displayed on a display

means". The illumination intensity data is clearly have real world value as being anti-aliased pixel illumiation intensity data to be displayed on a display means, and thus is a useful, concrete and tangible result. The present invention, on the other hand, produce a result that is a mere number indicating the extrema of a set of numbers. Since the claims fails to recite any practical application for the invention, the result clearly does not have any real world value and thus is not useful, concrete and tangible. In addition, The claims are also rejected because the claims appear to cover every substantial practical application, and thus also directed to a preemption of the claimed computation in any and every practical applications. Applicant's argument that there are plenty of ways to calculate extrema that do not require the claimed steps is irrelevant.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis, Jr. A. Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuong D Ngo/
Primary Examiner, Art Unit 2193

12/22/2008